

SUPPORT FOR THE AMENDMENT

Support for the amendment to claims 1 and 6 is found on page 8, lines 1-5 and page 15., lines 7-11 of the specification. No new matter would be added to this application by entry of this amendment.

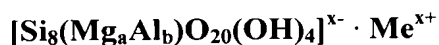
Upon entry of this amendment, claims 1, 2, 5-8 and 10-15 will remain active in this application.

### REQUEST FOR RECONSIDERATION

The claimed invention is directed to a softening detergent composition, a washing method and a method for preparing a softening detergent composition.

Detergent compositions having a softening effect have been developed in order to address fiber stiffness often associated with washing. Inadequate softening effects have been obtained by addition of conventional clay material such as smectite. Formulations containing clay materials have been reported but have yet to provide entirely satisfactory result. While hectorite clays have been identified in Baeck et al. as providing excellent deposition effects and therefore softening effects, hectorite is a more expensive smectite type clay. The less expensive montmorillonite clay has heretofore been lacking in softening effects. Thus, more effective softening detergent formulations based on montmorillonite type clays are sought.

The claimed invention addresses this problem by providing a softening detergent composition comprising (a) 1-30 wt.% of **a clay mineral represented by formula (3):**



**wherein each of a, b and x satisfies  $0 < a \leq 6$ ,  $0 < b \leq 4$ ,  $x=12-2a-3b$ , and Me is at least one member selected from the group consisting of Na, K, Li,  $\text{Ca}^{1/2}$ ,  $\text{Mg}^{1/2}$  and  $\text{NH}_4$ ,** (b) 0.5-20 wt. % of a sodium carbonate-hydrogen peroxide adduct, (c) 0.1-20 wt.% of an aromatic ester sulfate salt or aromatic ester carboxylate salt, (d) 0.4-20 wt. % of **a fatty carboxylic acid salt**, a component corresponding to a surfactant other than component (d) which comprise 35-70 % by mass of an alkylbenzenesulfonate and 10-60 wt. % of a surfactant as prescribed in JIS K 3362:1998. Applicants have discovered the combination of sodium carbonate-hydrogen peroxide adduct, an aromatic ester sulfate or carboxylate, with **a clay mineral represented by formula (3)**, fatty carboxylic acid salt, surfactant other than (d) which comprises 35-70 wt. % of an alkylbenzenesulfonate and proscribed surfactant to

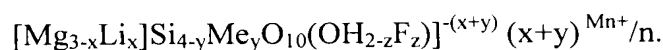
provide for an enhanced softening effect. Such a composition is nowhere disclosed or suggested in the cited references of record.

The rejection of claims 1, 5-8 and 10-15 under 35 U.S.C. §103(a) over Baeck et al. EP 297,673 as affirmed by Jayawant U.S. 3,860,694 in view of Storm et al. GB 1 400 898 is respectfully traversed.

*No Disclosure Of a Clay Mineral of Formula (3)*

The cited art of record fails to disclose a clay mineral of formula (3).

Baeck et al. discloses an unusually great property for deposition of hectorite clays which is not possessed of conventional smectite-type clays (page 3, lines 17-21). The hectorite clay of Baeck et al. is of the formula



There is no disclosure of a clay mineral of the formula (3) of  $[\text{Si}_8(\text{Mg}_a\text{Al}_b)\text{O}_{20}(\text{OH})_4]^{x-} \cdot \text{Me}^{x+}$ . Applicants note that the claims have been amended to recite the specific clay mineral of formula (3). Since the claimed mineral formula is not disclosed the claimed invention is not rendered obvious by this reference.

While GB '898 has been cited for a disclosure of smectite-type clays, this reference also fails to disclose a clay mineral of formula (3) as claimed. Thus, the claimed invention is not rendered obvious by these references and withdrawal of the rejection for obviousness is respectfully requested.

*Montmorillonite And Hectorite Clays Are Not Recognized As Equivalent Smectite Clays*

Contrary to the reasoning on page 6 of the official action, montmorillonite and hectorite are not identified as functionally equivalent smectite clays. Montmorillonite and hectorite are simply two of several species of smectite clays. To the contrary, hectorite clays are identified as providing unusually great deposition properties than conventional smectite

clays, (page 3, lines 17-21). As such there would have been no motivation to modify the hectorite containing composition of Beack et al. with a montmorillonite clay as montmorillonite clay is identified as **not possessed of unusually great deposition properties**. There simply would have been no motivation to replace the hectorite clay of Baeck et al. with an otherwise inferior clay mineral in terms of deposition performance.

Since there is no motivation to have replace the hectorite clay of Baeck et al. with an otherwise inferior clay mineral, and there is no disclosure of a clay mineral of formula (3) as claimed, the claimed invention is not rendered obvious by these references and withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

The rejection of claims 1, 5, 6, 7 under 35 U.S.C. §102(b) over Baker et al. U.S. 2002/0128165 as affirmed by Jayawant U.S. 3,860,694 is respectfully traversed.

Baker et al. fails to disclose or suggest the claimed composition comprising 0.4 to 20 % by mass of a salt of **a fatty carboxylic acid**.

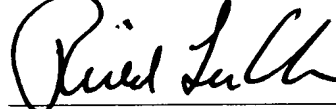
Paragraph 5 of the outstanding official action reference composition I on pages 11-13 as meeting all of the limitation of claims 1, 5, 6 and 7. There is no disclosure of a salt of a fatty carboxylic acid. Specifically, TAS is a sulfonate and not a salt of a fatty carboxylic acid. LAS is a sulfate and not a salt of a fatty carboxylic acid. MBAS is not a salt of a fatty carboxylic acid. C<sub>45</sub>AE<sub>3</sub>S is a sulfate and is not a salt of a fatty carboxylic acid. Carbonate is not a salt of a fatty carboxylic acid. Sodium citrate is not a salt of a fatty carboxylic acid. Zeolite A is not a salt of a fatty carboxylic acid. Sodium silicate is not a salt of a fatty carboxylic acid. MA/AA or AA builder are not a salt of a fatty carboxylic acid. Effervescence granule of carbonate/bicarbonate/citric acid is not a salt of a fatty carboxylic acid. Sodium bicarbonate is not a salt of a fatty carboxylic acid. NOBS is a sulfonate salt and is not a salt of a fatty carboxylic acid. Percarbonate is not a salt of a fatty carboxylic acid. Photobleach is not a salt of a fatty acid. Enzymes are not a salt of a fatty carboxylic

acid. Suds suppresser are not a salt of a fatty carboxylic acid. Bentonite clay is not a salt of a fatty carboxylic acid. Dyed carbonate is not a salt of a fatty carboxylic acid. Brightener is not a salt of a fatty carboxylic acid.. Perfume is not a salt of a fatty carboxylic acid. These are all of the components of composition I. In view of the examiner's position that a sulfonic acid is a fatty acid, applicants have now amended claim 1 to recite that the fatty acid salt is a "fatty carboxylic acid." Since the rejection is based on a factually erroneous determination as to the presence of a salt of a fatty carboxylic acid, the claimed invention is not anticipated nor rendered obvious by composition I of Baker et al. Withdrawal of the rejection under 35 U.S.C. §102(b) is respectfully requested.

Applicants submit that this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon



---

Richard L. Chinn, Ph.D.  
Attorney of Record  
Registration No. 34,305

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)